

numbers, 4000, were raised by a rate, and 6000, by subscription.

The tower contains a flue ring of ten bells, which were recast by Ruddle at the beginning of the last century. The inscription on one is, "Peace and good neighbourhood," and on another,

"I to the church the living call,
And to the grave I summon all."

The height of the tower is about 90 feet, the size at the bottom, exclusive of the buttresses, about 25 feet square. The walls are of great thickness. The proportions are exceedingly good.

The exterior of the body of the church, with the exception of the new part at the east end, presents a miserably uneccelesiastical aspect, and is in a bad state of repair. It is to be hoped that a long time will not be suffered to elapse before the whole be restored in a fitting and substantial manner. His lordship, the bishop, who together with Mr. Baker and the committee, has evinced great interest in the progress of the works, has expressed his willingness, we understand, to aid in effecting this much called for alteration. The wooden porch had part of the south side of the building are seen in the engraving, and will give some idea of the general character, or rather want of character.

A correspondent addressed us some time ago on the present state of Fulham parish, and the necessity which exists for improving it. Much might be done if the inhabitants would look at the question broadly, and co-operate for their mutual interest. We hope soon to hear, that a committee is appointed to take the subject into earnest consideration.

PROFESSOR COCKERELL'S LECTURES ON ARCHITECTURE.

THE third lecture of this course was delivered on Thursday, the 22nd inst., at the Royal Academy. Mr. Cockerell stated, that he should now continue his observations on the commentators of Vitruvius,—showing further, that the Gothic architects adhered strictly to what they considered the rules of that author; also, on the results attainable in Gothic architecture, the originality of its treatment, and the importance of like originality in this day; the Vitruvian theory derived from the human form, the middle-age version of that theory, and the use of the peculiar form called the Vesica Piscis—the origin of which he considered was greatly misunderstood.—The manuscript books of Vitruvius had been preserved, but the plates which had accompanied them were lost. The mediæval architects, therefore, had nothing to guide them but the text of the author; and their own interpretation of its meaning led to as grand and beautiful conceptions, as ever the classical architects had attained. This style was the expression of the wants and feelings of the time, and when the necessities of the age had no longer an influence, classical architecture revived; now by a change, doubtless as much required, the style of middle-age architecture was supplanting the classical. The various styles of Gothic architecture being expressive of the condition at each epoch, whoever undertook the pursuit of this branch of art, must be well versed in general history. Clio must be the especial Muse of such a student. The monkish chronicle was lost or perished; but the stone became an enduring record. Victor Hugo had said, and there was much propriety in the opinion, that as the fruits of the invention of printing ripened, sculpture and painting, which had previously been necessary for the fulfilment of man's most ardent desires, were superseded. For mediæval architecture was the hieroglyphic writing of the past. And therefore, that the system of imitation, indulged in by the slavish copyists, who so abounded in these times, was discreditable. The mode of expression, formerly adopted in architecture, was as unfitted to the circumstances of our day, as would be the English of William of

Malmesbury for a leading article in *The Times* newspaper. Remarking on the great prevalence of Gothic architecture at present, and the ardour in investigations, which had absorbed the whole of Europe, he said, that it was necessary for these lectures to subscribe to the spirit of the times; and that, therefore, he had determined this year to devote them to the present subject. He referred to his previous lecture,* saying, that the proofs he had then offered, as to the influence of the doctrines of Vitruvius upon the mediæval architects, he considered to be ample; and that Vitruvius was in the highest esteem with the architects of that day. He had, also, given the explanation of some of the terms according to the middle-age version.—The professor then referred to a diagram from the work of Cæsarionus, and gave that author's explanation of the Vitruvian theory of the figure. Amongst others, which we are not able to illustrate here, there was a perpendicular line or axis bisecting the figure down the middle, and at the feet a horizontal line. For the purpose of erecting the latter line, as a perpendicular to the other, two arcs were struck from centres, according to the ordinary geometrical method. Thus, the figure which these arcs inclosed was bisected by a long and short axis. He then explained the system of the middle ages, and the proportion by aliquot parts, according to the principles of the human form, saying that the Gothic architects were better acquainted with the fundamental law of proportion of parts than the classical architects themselves. According to Cæsarionus, Vitruvius intended his theory of the figure to apply to the plan, as well as to the elevation;—and in a passage which the professor quoted, the author argued that it was just as important, that the plan should be regulated by the rules of symmetry, as any other part of the building, and instanced "Michael Angelo, the Florentine," as one who observed rules in this respect.

Mr. Cockerell then shewed, that the two arcs, before referred to, were in fact the mystical figure, called the *Vesica Piscis*, so much in use during the middle ages. He shewed its application, as surrounding a figure of the Trinity. He next directed attention to the long and short axis, and said, that the *Vesica Piscis* was adopted at the first, solely for the geometrical purpose of erecting a perpendicular upon a given straight line. All ideas, referring its origin to its connection with the fish, and the word ΙΧΘΥΣ, he considered to be erroneous. The Cambridge Camden Society had overlooked what he now suggested, and had only endeavoured to shew the connection between the fish, the emblem of Christ, and the monogram IHS, as originating from the Greek word for "fish," the letters of which they explained to mean Ιησους Χριστος Θεου Υιος, Σωτης; or, Jesus Christ, the Son of God, the Saviour. They had seen nothing of the practical purpose, which was evident to architects, but were always for shewing their knowledge of Greek. He then referred to the supposed application of the plan to the body of the Saviour, and said that so deeply had this supposition been implanted in Germany, that the early reformers even would never attack the eastern part of a town, because the east end was supposed to represent the head of the Saviour. In referring to the investigations of Mr. Kerrieh, into the use of the *Vesica Piscis* ("Archæologia," vol. xix.—37), he allowed that great credit was due to that individual, but said that he had, in claiming the application as "a sort of discovery," usurped that to which he had no right, as it had been explained by Cæsarionus. He shewed, that the plan of Milan Cathedral was inclosed in the figure of the *Vesica Piscis*, and itself inclosed two equilateral triangles, and fourteen equal squares one way, and eight the other. He also shewed, that it was the general rule to inclose the plan in the *Vesica Piscis*, and that St. Paul's Cathedral, the north and south porch being included, was amongst the number.

As to the meaning of that part of Cæsarionus's diagram, in which he represents the equal squares, Mr. Cockerell had long felt in difficulty, and had only lately been enlightened upon it through the aid of William of Wykeham. Mr. Sidney Hawkins, who, in his volume on the "Origin of Gothic architecture," had given

a long account of his acquisition of a copy of "Cæsarionus," had entirely misrepresented the diagram, and had said nothing to explain it. There was, indeed, great difficulty in understanding it; but he now felt satisfied as to its meaning. He then proceeded to explain the other element in the proportioning of a plan, which, in the words of Mr. Kerrieh, he might venture to call "a sort of 'discovery' of his own." As was said by an old author, he had no doubt, that many would say, when they heard it, that they had known it long before; but he was not aware of any such explanation. The system was shewn by the professor from plans of several Gothic buildings, in all of which it was clearly observable, and in most of the cathedrals, the names, amongst others, including Westminster, Lichfield, and York. It may be thus explained. For example:—in what was called the *tetra-style* arrangement, or that having four buttresses in the west front, the whole area was divided into equal squares, and the piers were placed at certain of the intersections. The system where the arrangement was diptral, or with six buttresses in the west front, and four rows of columns, was merely an extension of the same principle. The reader will better understand the description by following it with the pencil. Let a horizontal line be drawn first, and then bisected by a perpendicular. Then set off, on each side of each line, a succession of equidistant parallel lines; these will of course form equal squares. Consider the first perpendicular line as the longitudinal axis of the building, the first line on each side as the line of the columns, and the second line as the wall of the building. Continue by the same method, to obtain the length of the transepts and position of their columns. Taking then the extreme length of the transepts as a radius, with the centres on the intersections at the horizontal line, describe two equal arcs, that is to say, the figure of the *Vesica Piscis*. The points of the figure will be upon the longitudinal axis, and will give the east and west ends of the building. The short axis gives the west wall of the transepts, and formed the base to two equilateral triangles, inclosed in the figure, as shewn in the professor's plan. He referred to Romsey Church as an instance of perfect accordance with the system, so much so, that a pier at the east end was placed on the axis of the figure; and he had no doubt that a similar feature had existed in the west end, as originally built. It was probably not departed from during the early schools; and the plans exhibited shewed that it was observed in the latest. This system of aliquot parts was by no means so completely carried out in the Grecian and Roman styles, as in that of the middle ages. Even in the basilicas, from which the plan of the Christian Church was supposed to have originated, we found a defect in this particular. In illustration, he referred to the plan of the basilica of Trajan, in which, as in that of St. Paul, the rows of columns were further apart in the transverse, than the distance between the columns in the longitudinal section. Therefore, this system of proportioning by equal squares was a high merit in the style of the middle ages, to which time the honour of the invention was undoubtedly due.

He then referred to the four squares, giving the position of the central tower, called by Cæsarionus—"octagon hecuba tholota pyramidata," about which he should have to offer further remarks. He also exhibited plans of the church of St. Zaccaria, and that of SSmo. Salvatore, at Venice, which though in the style of the early revival, preserved the system of Gothic architecture in the plan, in which, also, a pleasing variation was made by coupling, or omitting, the arrangement at alternate intersections.

In reference to a system of proportion in the section of a building, Mr. Cockerell explained, that the Gothic architects adopted a mode, in which equilateral triangles were employed. This he shewed from a section of Milan Cathedral, which was given in Cæsarionus's work. He also shewed, that the same rule of proportioning the height to the width, that is to say, making the height to the crown of the centre vaulting equal to the perpendicular height of an equilateral triangle, whose sides were each four squares, where the arrangement was "tetrastyle," and six squares, where it was "diptral," and "hexastyle" was the universal

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